ABSTRACT

A method for planarizing a surface of an electrically conductive layer on a substrate, where the surface of the electrically conductive layer has relatively high features and relatively low features. A viscous material is applied to the surface of the electrically conductive layer, whereby at least the relatively low features are covered by the viscous material. The substrate is immersed in an electrically conductive solution. An electrical potential is applied between the electrically conductive layer and an electrode within the electrically conductive solution, whereby reaction kinetics favor erosion of the electrically conductive layer. The electrically conductive solution is agitated, thereby selectively uncovering the viscous material from at least features that are relatively high, and thereby preferentially planarizing at least the features that are relatively high.